

AMERICAN BEE JOURNAL



G. H. JOHNSON AND SWARM OF BEES.



APIARY OF G. H. JOHNSON, OF WOODSTOCK, CONN.
(See page 614)



American Bee Journal



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The illustration shows one of the A. K. Ferris hives under process of manipulation. Every bee-keeper will be interested in reading about these hives arranged according to the Ferris' system for the Prevention of Swarming for Comb Honey Production.

The Non-Swarming articles by Mr. Ferris and Mr. G. M. Doolittle are proving exceedingly interesting. This great series is fully illustrated and will be continued throughout the remaining issues of 1906.

Among our other regular contributors are Mr. J. A. Green, Dr. C. C. Miller, E. W. Alexander, and many other bee-keepers of note.

No bee-keeper who will take time to look through one number of *Gleanings in Bee Culture* can satisfy himself that he does not need this "Journal of Profit."

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Gleanings in Bee-Culture

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GERMAN BEE-BRUSH

Some months ago Mr. R. F. Holtermann called our attention to a bee-brush which he received from Germany, made of genuine bristle or horsehair. He had used one a whole season, washing it out often, and it appeared to be as good at the end of the season as at the beginning. He considered it so far ahead of anything he had ever seen or used that he wanted no other. We concluded if it was so good for him it must be equally good for others. We are now provided with a stock which we offer at 25 cents each; by mail, 30 cents. The bristles are black, and about 2 inches long, extending 8 inches on the handle. Made of white hair it would cost 5 cents more.



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GEORGE W. YORK, Editor

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An Independent Bee-Paper

THE AMERICAN BEE JOURNAL is absolutely an independent publication, and neither is it nor its editor connected in any way with any bee-supply business whatsoever. It stands entirely upon its merits as an educative force in the field of bee-keeping, and as a medium for legitimate advertisers in Apicultural or other lines. It is the oldest, and only weekly, journal of its kind in America. Its publishers believe that it deserves to be in the hands of every would-be progressive, successful bee-keeper in the land. It is in its 46th year, and to-day is acknowledged to be better in every way than at any time during its long and honorable history.



When Swarms Cluster Together

Sometimes the bee-keeper is thrown into despair by the issuing of several swarms at once, all uniting in one huge cluster. C. W. Dayton gives in *Gleanings* an original plan for managing such cases. He says he *wants the swarms to unite, as it makes the work easier*. The queens will, be balled, and that makes it easy to pick out the queens.

The cluster is put into a screened cage or hive for 8 or 10 hours, the queens being removed, and he thinks these hours of uneasiness and queenlessness free them of the swarming mania. Then they are allowed to return to their own hives, not in a body, but singly as queenless bees, each seeking individually its own hive. He says:

With more than one swarm in a cluster it causes matters to be very unsettled. Then when bees from several swarms are caged together it is all the more confusing in their swarming. The more confusion the better. It abstracts the bees from their own intentions. When first caged they will buzz and bump against the screen for awhile, but finally settle in a compact, quiet cluster, and the queens will remain quiet. Then the bees can be poured out of the box on a smooth space of ground, and the queens picked up and caged in a few moments. When all the queens are secured, set the box down on the ground, open side down, and in an hour or so the bees will cluster in it again. Then put the screen on to confine them until it is time to let them go home, which should be near night. Wait until the bees find out that they have no queens, then they will want to get out and return to their own hive, thinking that their own queen did not issue with them. Open the screen only partially so that they can escape slowly. Do not throw them out in a pile on the ground. They are now dissatisfied with the strange cluster they are about to leave, and they will not go in with another cluster of strange bees unless it is by the confusion of a mass of bees together. They will not cluster "on other hives."

For many the plan will not be feasible, because it will not be easy to tell to which of the different colonies the dif-

ferent queens belong. But to Mr. Dayton this is no objection, for he wants the old queens removed, and later on a young queen or a ripe cell to be given.

Yet even to those who have clipped queens the plan may be of much value at times when two or more swarms without any queen unite. Left to themselves they are likely to make bad work by going in a cluster to the wrong hive. Imprisoned for several hours, and then allowed to escape as queenless bees, a few at a time, they might be expected to return, each bee to its own hive.

Bees and Bee-Keeping in Japan.

Mr. T. B. Blow, a large supply dealer at Welwyn, England, made a tour of this country some years ago, visiting a number of bee-keepers. A little later he married a Japanese lady, and settled in Japan. Although having become a bee-keeper in Japan, it seems he had to send to England for honey for his own table. The following extracts from a letter in the *British Bee Journal* will be of interest to those who desire to know more about Japan:

No sooner did I settle down in this, my adopted country, than the bee-fever was soon on me, and I determined again to keep bees. They are not plentiful in Japan (despite the statistics of the Agricultural Department schedule, the supposed number of colonies which is, I should think, greatly over-estimated.) Honey is not used in Japan for food, but as medicine. The bees are kept in square boxes of about one cubic foot contents, and cubical in shape. There is a door at back, and the comb honey is cut out whenever available, and is crushed (along with the brood, often,) and strained, and in this state sold. Very little wax is obtained, for though wax is used extensively in this country for various purposes, it is vegetable wax, mainly.

Having got a swarm of native bees into a civilized hive with proper appurtenances, he says:

And now the troubles began. The Japanese bees are smaller than the European, and they very reluctantly took to the comb foundation; undoubtedly the cells were too large for them to deal with well. Seeing the multitudes of flowers around, one would have expected an amazing yield of honey; for instance, in April and May, one may travel for hundreds of miles and see one blaze of yellow from the mustard and rape flowers (the oil-producing plant,) but beyond this there is nothing. Later on the whole country is under rice, which, of course, is useless. But the bees themselves are lazy—there is some food to be got almost all the year round (for we have no cold, wet winter like that of England,) and the bees certainly do not store much honey, and so, after two years' experience, I conclude that it is cheaper to buy honey than to produce it, and in quality our English honey is vastly superior; so though my bees are still alive and well, I allow them the use of all they gather, or nearly all.

Correct Nomenclature in Bee-Keeping

Bee-keepers average up well in intelligence, and so it is nothing strange that when a word has come into use with a wrong meaning, there should be protest. Prof. Cook has protested vigorously against calling the larva of the bee-moth a "wax-worm," insisting that the term should never be used. Prof. Cook is a good bee-keeper, yet he is a scientist—an entomologist—before he is a bee-keeper, and so, no doubt, more jealous as to correct names of bugs, worms, and such things than the mere bee-keeper. But if

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he will suggest something correct, and just as short as "wax-worm," it is very likely that the correct term will grow into general use. The layman, however, who is supported by the dictionary in his accustomed use of the word "worm," will think it is asking a good deal of him to insist that instead of saying "I dug 100 worms out of some wormy combs," he shall say, "I dug 100 larvæ of the bee-moth out of some combs that were infested with the larvæ of the bee-moth."

The case of the word "hybrid" seems not so difficult. Something has been said about it in previous numbers, and here is something more:

MR. EDITOR:—That "Southern Beedom" man has gotten me all tangled up as to what he means, page 448, where he proclaims himself "in favor of using the terms 'cross' and 'hybrid' in the right sense, as per R. F. Holtermann, page 341." Now what does he mean as the right sense in which to use the word "hybrid"? If I understand correctly what Mr. Holtermann says, he wouldn't use the word "hybrid" at all. But Mr. Scholl, at the top of page 448, speaks of "some suitable cross, or, better still, a hybrid." Evidently he means by "hybrid" something different from a "cross," now what does he mean?

It seems unfortunate that the word "hybrid" was ever used as applying to bees, but it is not impossible yet to use in its place the correct word—"cross"—unless we take the ground that when a word has been wrongly used for some time there is no possibility of using the right word, as the editor of *Gleanings* does, when he says, "The word 'shook,' as an adjective derived from a verb describing a certain kind of artificial swarm, has become so thoroughly engrafted into the nomenclature of bee-keepers, that it seems utterly impossible to choke it out of literature." That's too weak a notion for so good a man to entertain, and he ought to have it "shook" out of him.

C. C. MILLER.

Is there any good reason why, when speaking of bees, the word "cross" may not in all cases be used in preference to "hybrid?"



Miscellaneous News - Items

Honey Prospects for 1906.—The following is sent out by General Manager France, showing the honey prospects for 1906 up to June 25, in a large portion of the United States:

Southern California—Fair crop; better farther north in State.
Texas—Three crops; first two, failure; last, good.
Colorado—Light crop; some lost their bees heavily in winter.
Mississippi Valley—Not half crop.
Michigan, Ohio and Indiana—Half crop.
Eastern States—Mostly good reports.
1905 crop about all sold; markets bare; demand good.

It would seem from the foregoing that there will not be a large honey crop this year. This taken with the fact that the 1905 crop is pretty well cleaned up, should somewhat stiffen up prices on honey. At any rate, it will be well to ask a fair price, and endeavor to hold to it. With a proper distribution there evidently will not be enough honey to go around this year.

Bryan as a Bee-Keeper.—Perhaps the best known American throughout the world to-day is Wm. Jennings Bryan—at least he holds the boards with President Roosevelt. Mr. Bryan is a representative American, and this is not written for any political reasons. It is quite well known that this worthy gentleman has been before the country for the high office of President on two occasions, and was beaten perhaps on account of his or his party's financial views. He is known to be a lover of rural life, and is looked upon, aside from his professional life, as a typical farmer. He has quite a lot of cattle, etc. He likes to do the work of a farmer, and for this the American people have come to like him all the better. Now, it comes to pass that this statesman-farmer is something of a bee-keeper—yes, a real, live bee-keeper—one of the kind that is taxed for keeping bees, and who pays the tax, too.

Recently, in making up the returns on his property, the assessor of his district found that Wm. Jennings Bryan had some bees—the telegram did not state whether the bees found the assessor first and applied their business ends

upon him, but at any rate the assessor put those bees down as valued at \$5. So Mr. Bryan has real honey-bees. And it may come to pass that the bees in his presidential bonnet may swarm and land him in the White House, and in such an event there is no doubt the bee-keepers throughout the land will not be ashamed of their bee-keeping president.

The foregoing information was sent to us by W. A. Pryal, of California. In case Mr. Bryan should ever become President, and take his bees to Washington, we have no doubt Mr. Pryal could be persuaded to be Secretary of Apiculture, although Dr. Phillips might be entitled to first claim to the position, especially if the civil service rules should obtain. However, there will probably be no competition for that position very soon.

But why have we not had a report of Bee-Keeper Bryan's average yield per colony? and is he running for comb or extracted honey as well as running for President?

Don't Lose Your Temper.—This is the heading of the following item signed by The Star Monthly:

Uncontrollable temper never spelt the road to success of any kind. A quick temper is a defect in a man. A man who always loses his temper is like a man on crutches in a foot-race.

Just figure it out. If you lose your temper at something a friend says or does, you are sorry for it afterward, for you have wounded your friend, who wished you no harm. This makes you feel badly. If, on the other hand, you lose your temper as the result of nagging, you have done just what the nagger wanted you to do. There may be occasions for righteous anger in life, but never for the loss of temper. Sense and dignity are always lost with temper.

Your temper is like a horse, each time you let it run away from you, the more unmanageable it becomes. Don't lose control. If not for others' sake, at least, for your own sake, keep your temper.—The Star Monthly.

Good advice is more easily given than taken. The Star Monthly—a splendid publication for boys—certainly offers excellent advice, which, if followed, would be a grand thing for all its readers. We have quoted several good things from this source during the past few months, which, though they may not have had a bearing on bee-keeping, still they may be a help to all of us bee-keepers, whether having few colonies or hundreds.

Please Give Page of Reference.—In communications intended for publication, reference is often made to something in a previous number, possibly in corroboration, possibly in refutation of what has been said. For a full understanding of the matter, it is generally necessary to know what was previously said, and in what connection it was said. To save quoting largely for this purpose, it is generally better that the reader should turn to the article referred to—a thing quickly and easily done if he knows just where to look for it, but often a time-consuming affair otherwise. A model writer, in this respect, is our genial friend, E. E. Hasty. Never does he refer to anything previously published without giving the exact page. If all our correspondents will kindly make a note of it, and give the page whenever referring to anything previously said in the American Bee Journal, it will add to the general comfort.

The Front Page Pictures were sent us by George H. Johnson, of East Woodstock, Conn. Accompanying them was the following, under date of June 21st:

I have been very successful with bees, having had them 6 years. Last season was a very profitable one. I have also been fortunate in not losing many colonies until the past winter, which proved not as good in that respect.

I have one swarm that came out May 15th, which has one super almost full of honey. I use cases and put 6 sections in each, or 24 sections in the super. I can see what the bees are doing by lifting the super off.

I am much interested in bees, and spend many a pleasant hour studying them.

GEORGE H. JOHNSON.

Appendix to Dr. Miller's "Forty Years."—All who have the first edition of "Forty Years Among the Bees" should also have the Appendix which appears in the new edition, issued recently. The complete new 344-page book, bound in cloth, is sent postpaid for \$1.00; the Appendix alone for 10 cents. Or, the book and the American Bee Journal a year—both for \$1.80; the Appendix and the American Bee Journal a year in advance, \$1.00. Send all orders to the American Bee Journal office.

American Bee Journal



Emptying T-Supers of Honey—Wiring and Splinting Frames, Etc.

BY DR. C. C. MILLER.

I AM glad to reply to your questions on page 465, Mr. Scholl. Your idea that sections were got out of a T-super by being put on a bearing-board and the super then pushed down is the same as the idea I first had, and that's just the way it was done a good many years ago. You seem to have some trouble in deciding whether I now push the sections down or pull the super up. Well, I do both. First the sections are pushed down the distance of $\frac{1}{4}$ inch—the super being upside down—and then the super is pulled up off the sections, the push-board holding them down so they do not come up with the super.

You want to know if it isn't a greater strain on the thumb and fingers and why it's done in just such a way. I suppose you mean as compared with the way first mentioned. I don't know that I ever thought of it before, for I've often worked at it all day long without feeling any special strain on the thumb and fingers, but now that you've called attention to it, there must be greater exertion of the thumb and fingers by the present than by the old way, but on the whole less labor is required, and less time, to empty 100 supers by the new than by the old way.

An important difference is that by the old way the sections were left standing right side up, and by the new way they are upside down. And they must be upside down to be easily taken apart, for it's an easy thing to pick off the T-tins and then pull the sections apart when they're upside down.

You also want my judgment as to using foundation in brood-frames, 10 sheets to the pound, two wires on each side, assisted by vertical splints. I don't—that is to say, it isn't easy to say how a thing would be that one has never tried; but I'll tell you how it looks to me. More care would have to be used with such thin foundation lest the splints should cut it in two, especially if a little too much pressure should be used. The wire would hinder the splints just a little from being pushed down in the foundation, but perhaps not seriously.

But if the splints work all right with such thin foundation, the combination ought to be a good deal better than the wires alone. Also, I think the splints alone would be better than the wires and splints. That is, if the same time and expense that the wires demand is used for extra splints the work will be more satisfactory. I hope you will experiment and tell us about it.

There are two things for you to find out: One is to find whether you can use splints on thin foundation without cutting the foundation in two. If you can manage that part all right, then you must find out how many splints must be used in a frame. The thinner the foundation, the closer must the splints be to prevent sagging. With such light foundation it might need splints about 2 inches apart. Where much of such work is done, it is possible some plan might be devised to do the work faster than to fasten in each splint one at a time.

RETENTION OF HEAT IN THE BROOD-NEST

On page 530, Mr. Doolittle, referring to my experiments of May 7, as given on page 441, asks whether the sun was shining on the hive at the time of the experiments, evidently thinking that would account for the greater heat in the hive as compared with the thermometer in the shade, for of course he is right in thinking that the thermometer outside was in the shade. As nearly as I now remember, on that day the sun didn't shine at all throughout the whole day,

a thing one would naturally guess from the fact stated on page 441 that throughout the whole day it was never warmer than 58 degrees.

Neither, I think, were the bees working busily at the time of the experiments, as Mr. Doolittle thinks, at least not throughout the whole day, but only in the warmer part of the day; for it will be noted that I said it was a cool day, but "as the day advanced bees worked busily."

So I think the increased temperature over the hive can hardly be accounted for by the sun shining on the hive, neither entirely by the breaking of the crust from bees going afieid. But even supposing the difference should be accounted for entirely by the fact of increased heat from the bees breaking the crust when going afieid does that not conflict severely with the view of Mr. Doolittle as given on page 364? He there says: "The heat from the cluster is not allowed to pass up into an upper hive, at any time when that heat is needed for the brood within the cluster of bees." We have it from so good an authority as G. M. Doolittle that never less than 92 degrees is needed for the brood within the cluster, and according to that no heat should be allowed to pass up when the outside temperature is below 92. May 7 it was 34 degrees lower than that, the warmest time in the day. Surely one would say of such a time that it is a "time when that heat is needed for the brood."

Very likely he is right to this extent, that at night there will be less difference than in the day, for there is then less activity, and so less heat produced. It will be noticed, too, that May 7, after 5 p. m., when I think the bees had ceased flying, the difference was only 9 degrees, which was less than at any time when the bees were flying. I'll try it to night, as he says night is the right time.

And I wish, too, that Mr. Doolittle would experiment, himself, with regard to this whole business, and tell us the results. I shall be glad, however, to hear that his bees are doing differently from mine, and keeping him on the jump gathering the crop, so that he has no time for experiments.

NEXT MORNING: I arranged an upper story with a thermometer in the afternoon, so that the bees would have abundant time to settle down quietly, and at 9 p. m. I found it was 64 in the upper story and 56 outside—a difference of 8 degrees or very nearly the same as when the bees stopped flying May 7.

I should not feel sorry, Mr. Doolittle, if you could still prove that no heat is lost from the cluster, for it would be a convenience to know that cracks and loose covers can do no harm; but I'm afraid that the only explanation of your mystery is that the bees stir up the chunks and make a better fire to make up for the heat that escapes when it gets colder.

Marengo, Ill.



Something About Comb-Building

BY G. M. DOOLITTLE.

AS I am having more letters than usual asking why swarms, hived in an empty hive, excepting frames having starters in them of worker foundation, build so much drone-comb, I thought I could do no better than to write a few words for the American Bee Journal regarding how the building of so much drone-comb might be avoided.

Nature has ordained that the queen shall cease her prolific laying just before a swarm from any colony is to issue, and for two reasons, the first of which is, that the queen can fly, for if taken from the colony when no such preparation has been made she cannot fly at all—she is so heavy with eggs. The second reason is, that the queen need not be damaged by an over-accumulation of eggs before there is time for the bees to construct comb in the new home for her to deposit her eggs in; thus we find that all good queens do not get fully prolific again after the swarm goes forth until about a week has elapsed after the swarm has arrived at its new home. During this week, comb has been built very rapidly, especially if the swarm is a large one and nectar is coming in rapidly from the fields, while the queen has not been able to keep up with the workers, the result of which is that the bees commence to build store-comb, which is always of the drone-size of cells.

This comb is mainly filled with honey the first sea-

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son, although most prime swarms will rear more or less drones in these drone-combs, unless the honey-flow is profuse enough to crowd them out.

But the main trouble comes in having this store-comb filled with drones after the bees have consumed the honey out of it the next winter and spring. I have often seen hives in neighboring apiaries nearly half filled with drone-comb, where good laying queens went out and were hived with swarms. Why, I say "good laying queens," is because some seem to think that no drone-comb is built under any circumstances by a swarm, unless the queen is old or beginning to fail.

The colonies above referred to were all hived in large hives with no surplus arrangements put on until a week after hiving, so it was necessary that the bees do all of their work in the body of the hive.

In the above I have given why swarms build drone-comb, for the majority of bee-keepers who do not use full sheets of foundation for their swarms. Now, how is such a state of affairs to be avoided by the one who wishes to have his swarms on started frames?

The way I manage is to give the colonies which are to build comb, a brood-chamber of only about one-half the size of the one from which the swarm came, this smaller size being made by contracting the chamber of the new hive to the size I wish, by means of dummies or division-boards, and also giving them one of the supers of sections at time of hiving. Or, to be more exact, the swarm is hived in the full-sized hive and left for 24 hours, when the frames they have not commenced work upon are taken away, dummies substituted, and the surplus arrangement of sections put on. In this way the swarm seems to work to better advantage, and is not liable to desert its hive, as is sometimes the case where the contracted chamber is given them on the start.

After having their home established by the building of comb, they will stand almost any kind of treatment thereafter without deserting. The super put on should contain a few sections having partly built comb in them left over from the previous season, while it is well to have the others filled with full sheets of the very thin foundation for section honey. This gives the bees plenty of room above to store honey, thus not crowding them in the brood-chamber, so that only comb of the worker size is built below, and that only so fast as the prolificness of the queen demands it. As her ability for laying increases, more comb is built, so that at the end of the season we have this contracted brood-chamber filled with nice worker-comb and lots of section honey.

By the above plan I secure three important items—lots of section honey, no drone-comb, and a hive full of nice, straight worker-comb, the latter costing less, according to my estimation, than it would to buy the foundation, say nothing about the labor and fuss of wiring the frames and fitting the foundation into them.

I hope those who are troubled with too much drone-comb in the body of the hive will try this plan, on a few colonies at least, for if it works as well with others as it does for me, it will be quite a saving to them both in vexation and in not rearing a host of useless drones to eat the honey which the industrious little workers gather.

Of course, all of the above is applicable only to those swarms which have laying queens with them, and does not apply at all to after-swarms or those having virgin queens. With such colonies there seems to be no disposition to build drone-comb, unless the swarm should be so large that comb is built far in excess of what the queen can fill with eggs, in which case a little drone-comb is sometimes built. Neither will drone-comb be built in the old colony after their young queen becomes fertile, because when an old colony gets such a queen, instinct teaches them that she will meet all their requirements of a mother-bee for the rest of that year, while drones are necessary only when a change of mothers is contemplated by the bees. Hence no eggs are deposited in drone-comb, even where such is already built in the hive, and much less is such comb built. Taking advantage of this fact I often manage to get one or two nice, perfect worker-combs built for future use, while the bees of these colonies are at work vigorously in the sections, by taking one or two full combs out from the center of the brood of colonies having such queens, and inserting empty

frames with starters of worker-comb foundation in their places. These frames are filled, apparently, without the cost of any section honey, while it seems to give great energy to the colony so building comb. The extra combs I secure in this way are used after the harvest of white honey is over, to fill out the hives which have been contracted for the prime swarms, so that they may have room in the brood-chamber to store sufficient honey for winter from the dark or buckwheat flow, which comes later on. In this way the white honey, which brings the best price, is mostly taken in the sections, while the bees winter on the dark honey, which is often almost a drug on the market.

Borodino, N. Y.



Gleaned from Foreign Exchanges

BY F. GREINER.

GERMANY—THE FLOWER'S NECTAR.

DR. O. FOLLENIUS says in "Die Biene," a German paper, that nectar contains anywhere from 7 to 40 percent sugar, and that the honey-bee can secure only a part of the nectar contained in each blossom. That which is necessary for the full development of the fruit can not be removed. According to the recollection of the writer of this it has not been claimed before that any of the nectar was necessary and appropriated for this development of the fruit. On the contrary, it has been held that the nectar was placed in the blossoms for the sole purpose of attracting insects.

BLACK HONEY OF THE PINE WOODS.

Large quantities of honey are often secured from pine woods in certain parts of Germany. This honey is nearly black in color, still it finds many admirers, and must therefore be of much better quality than the honey-dew gathered here at times. The Emmendingen Bee-Keepers' Society furnishes all the honey for the Grand duke's table (in Karlsruhe), and it is specified that this honey must be the black honey of the pine woods.—Bztg. for Schlesw.-Holstein.

AUSTRIA.

FEEDING BEES A BAKED HEN.

The old-time practice of feeding bees with a baked hen, as has been reported occasionally, has undoubtedly furnished food for smiles and ridicule. Jno. Sponer ventures and experimentation of this singular practice in the *Deut. Imker* for March. He says the occurrence of this came at a time when dishes suitable for feeding were extremely rare, and when a steamed hen, still hot, was shoved under a colony which hesitated to take advantage of a good, warm day, to have a cleansing flight. The warm air rising from the hot meat did not fail to bring the bees to their senses.

The tender meat of the fowl also furnished water to the bees, and probably saved many a one from finding death at the brook. It was a convenient way to "water" the bees when hens were cheap and dishes scarce. These were advantages which did not fail to make their showing in the development of colonies so treated. That mice came later and cleaned away the drier portions of the hen's carcass escaped the observation of these bee-keepers of times gone by. But, then, the hen had served its purpose.

AUSTRALIA.

AUSTRALIAN HONEY IN BRITAIN.

We are told by the Australian bee-keepers that their honey is of superior quality and most excellent flavor, but others are of different opinions. An effort has been made to induce the Britons to use the Australian product, but without success so far. The German people make a similar claim as to the superiority of their honey. It is doubtful, however, that the claim is well-founded, although honey, which I have sent to friends in Germany not interested in bee-culture, was pronounced by them inferior to the German product.

HONEY SEASON UNFAVORABLE IN AUSTRALIA.

The past honey season in Australia was unfavorable. August is the spring month, and bees were in good shape, with plenty of brood, but a long-continued cold-spell de-

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populated the hives to such an extent that from 3 to 4 colonies had to be united to make one good one. Very little honey could be harvested except during the fall honey-flow, in December.—*Austr. Bee Bulletin.*



Conducted by EMMA M. WILSON, Marengo, Ill.

An Old Bee-Poem

The following was kindly sent in by Mr. Edwin Bevins, of Leon, Iowa, who says he "copied it for the American Bee Journal to while away an idle hour:"

The Bee and the Flowers

By Mary Lundie Duncan, born at Kelso, Scotland, 1814, died 1840.

MOTHER.

Ah! do not, do not touch that bee;
Stand still, its busy course to see,
But take your hand away;
For, though 'tis neither large nor strong,
It has a sting both sharp and long,
And soon could spoil your play.

You need not fear; it loves, like you,
The flowers of varied form and hue.
They yield it honied spoil;
It only stings the thoughtless train,
Who seek its life, or give it pain,
Or stop its happy toil.

Or idle drones which labor not,
But eat the honey it has sought
To store the crowded hive;
Or insects that would enter there,
To steal the food it brings with care
To keep its race alive.

In search of flowers this food that yield,
It flies abroad through hill and field
With pleasant, humming sound;
It rests on many a blossom bright,
That opens, far from human sight,
To deck the lonely ground.

Flowers were not made for man alone,
But freely o'er the earth are strewn,
To bless the creatures, too;
And many an insect nation dwells
Among fair fields and mossy cells,
That we shall never view.

CHILD.

I did not know the bee could sting;
I see it fly on rapid wing
Among the garden bowers;
And now it 'lights upon a rose,
And now to a jasmine branch it goes—
Say, will it sting the flowers?

It settles where the woodbine sweet
Twines round the tree—it plants its feet—
How firm and fast they cling!
Oh, how I love the pretty flowers,
That bloom through all the sunny hours—
Pray, do not let it sting.

The Poppy as a Pollen Yelder

So Brother Hasty thinks I left Hamlet out of my Hamlet by omitting the poppy from the list of nectar-yielding flowers for a floral display, page 525. The omission was chiefly due to ignorance.

We have never had enough poppies to have a chance to learn what the bees did think of them. This peculiarity, however, has been noticed (I wonder if Brother Hasty has noticed it?) that poppy-pollen is black. At present we have just one lone poppy—the Poppy of Oz—

but the poor, sickly thing doesn't look at present as if it could stand bees or anything else.

Thanks, Brother Hasty for calling attention to the poppy, especially as some of the later kinds are of marvelous beauty. But pray, why did you leave us in suspense as to your "prime favorite among the flowers, even if it does not draw bees at all?" Please tell us what it is.

Honey for Brain-Work

A well-known author acting on the advice of his doctor, uses honey largely, and has amply proved by experience that in doing heavy brain work there is nothing better for the system than honey.—*British Bee-Journal.*

How to Manage an Apiary Successfully

Here's a sister of an inquiring turn of mind. It's Mrs. F. Wilbur Frey, of Michigan, who says in the Bee-Keepers' Review:

Here are a few of the things I want to know:

1st. How to keep a large apiary together until the honey is completed.

2d. The easiest way to get rid of old queens, and have all young queens in the bee-yard in the fall, and, at the same time, keep the colonies all strong, and ready for all harvests.

3d. How to keep bees from wanting to swarm.

4th. How to get all nice, clean honey without travel-stains.

It is to be hoped that she may be successful in getting satisfactory answers to her questions, and may then give the rest of us the benefit of such answers. Especially is it desirable to get answer to her 3d question, for that goes to the root of matters; and when we find the cause—rather if we find the cause—we may then seek with some intelligence for the remedy.

As to the 4th question, we already have an answer—at least for this locality. It is to take off each super before the bees begin to darken the central sections; for the darkening always begins centrally. That often obliges taking off a super before the corner sections are sealed; in which case the unfinished sections from several supers are massed together in one super and returned to the bees to be finished.



Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

Three Queens in One Brood-Chamber

In one of my out-apiaries I had 2 hives near each other that had old, failing queens. As it was in early spring I had no young queens to replace them, so I decided to unite them by putting 1 hive on top of the other, and letting the bees settle it so far as the queens were concerned—as they were both good Italians. In about 2 weeks I was back in the yard and found this united colony with capped queen-cells, but destroyed all but one of the best cells for fear of swarming. On a third visit I found this colony unusually strong, and as I decided it might swarm anyway, even with this young laying queen (as I was sure she was mated and laying by this time), I concluded to hunt her out and clip her wing. I soon found one of the old clipped queens hobbling about over the combs depositing eggs. I set the comb on the outside to look further for the young one, and to my surprise found the second old clipped queen; and on further looking I found a third queen that was mated and laying, which was the young one. So I had three laying

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queens in a hive at one time. But soon one of the old queens disappeared, and on my last visit the other old one was also gone.

SOUTHERN DEPARTMENTS IN NORTHERN BEE-PAPERS.

We are pleased to note that almost all the leading bee-papers are conducting a Southern Department now. This is as it should be, for we have some good bee-keepers here, the interest is growing in apiculture, and there is as much difference in bee-keeping in the North and the South as there is in the seasons and climates. And the very things that are of the most interest to Northern bee-keepers are of little interest to us here; besides, our honey-plants are all different.

Rescue, Texas.

L. B. Smith.

A New Race of Bees (?)

Near one of our out-yards belonging to Prof. R. F. Smith and myself there was found in the cotton-field of the plantation a large "bees'-nest," as shown in the picture. This was built, evidently, by one of the swarms from our apiary, as we lost several fine swarms there last spring.

The "nest" was taken to a place in one of the department museums, where it attracted much attention. One of the cadets "sent in" the following "special telegraph" concerning the "discovery," to The Battalion, published at A. & M. College of Texas:

No More Boll-Weevils

REMARKABLE AND IMPORTANT DISCOVERY ON A BRAZOS "BOTTOM" PLANTATION.

We take pleasure in reprinting the following from the Texas Daily Cotton Patch:

A POSSIBLE SOLUTION OF THE BOLL-WEEVIL PROBLEM.

Our Brazos "Bottom" special correspondent telegraphs: A tremendous sensation has been caused among the farmers of this vicinity by the discovery of several bee-nests on the large cotton plantation of Messrs. Carson & Smith. Not that bees are a novelty here, but the average farmer is apt to suspect that his credulity is being imposed upon, when told the bees have commenced to build their nests on cotton-stalks in the middle of a thousand-acre field. Yet, seeing is believing.



THE NEST OF A NEW RACE OF BEES—"WEEVILLUM BEELZIBUVIUS." C. & S.

Prof. Carson, when seen by your correspondent, was filled with enthusiasm by what he regards as the most

important event that has ever happened in the South, from an economic standpoint. According to investigation which he and his junior partner, Prof. Smith, have been making, they have elicited the fact that these bees are of a very peculiar ancestry—apparently a mongrel cross between the ordinary wild bee, a new strain of Italian bees, imported by some "Dago" farmers in the neighborhood, and the common red ant. It seems that ever since the cotton-picking season ended the "niggers" living on the plantation have been well supplied with honey from the combs constructed on the cotton-stalks. Prof. Smith exhibited one of the nests in the main building of the A. & M. College, which had had 20 pounds of honey extracted from the comb. It is probable that this estimate, however, is slightly incorrect.

The question is, How was all this honey made during the winter, the combs being constantly renewed as fast as the darkies took them away? "Very simple," said Mr. Carson. "This strange race of bees has been feeding on the boll-weevil, which were hibernating, and there ain't nary a one left. We expect to make a bale and a half of cotton to the acre next year."

The U. S. Department of Agriculture has given orders to stop the importation of Guatemalan ants, as they believe that the new variety of insect, known already as the *Weevillum Beelzibuvius*, of Carson & Smith, is the only enemy that can successfully exterminate the boll-weevil.

Prof. Smith, whose deductive faculties as a professor of mathematics are, naturally, of a very high order, maintains that there is a powerful affinity between these peculiar insects and the superior cotton plants grown on the Carson & Smith estate. This contention seems a very plausible one, as we never heard of them previously.

Many colonies of the *Weevillum Beelzibuvius* are now in captivity, and orders are already coming in from all parts of the State, for specimens. Messrs. Carson & Smith, however, wish me to say that these insects will build their nests only on cotton-stalks of their own breeding. With every bushel of seed at \$10 they will send the nucleus of a colony of these predatory insects, which will supply honey all through the winter and destroy the boll-weevil on the plantation at the same time.



Conducted by MORLEY PETTIT, Villa Nova, Ont.

Carbolic Acid in Bee-Keeping

With the increased interest that is being taken in bee-keeping, numerous new methods of quieting bees have been suggested. Amongst the more recent of these is carbolic acid which has long been used as a disinfectant in the treatment of foul brood. Commenting upon the use of carbolic acid, a contributor to the Journal of Horticulture, London, England, makes the following remarks:

The introduction of carbolic acid as an intimidator in bee-keeping has been of incalculable value in rendering manipulations easy and operators confident, but either through fear of handling it, or lack of information respecting its use in such a capacity, it is not used as extensively as its merits demand. It is admitted that the more experienced amongst us use it regularly, and would not on any account be without it in the apiary. Its advancement only need to be more widely known for its use to become general. One of the many uses of this acid is as a preventive of robbing. A solution composed of two parts water and one acid smeared with a feather over the alighting board of a hive attached by robbers will in most cases, if taken early enough, at once effectually stop the trouble. In obstinate cases the smearing should be carried on at intervals of an hour until the disturbance

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ceases. It is preferable to have the diluted solution, as the acid when used pure is so strong that the slightest contact will destroy a bee, injure clothing of the operator, or blister the hands. Even the diluted acid must not be used too freely. The use of a two of water to one of acid solution for quieting bees is the one which ought to be more generally in use.

The following method explains its use:—To subdue a colony the quilt is slightly turned back at one side, and a feather moistened with the mixture is passed over the top of each frame as the quilt is removed, and every bee quickly disappears below much faster than when smoke is used, and there is not the slightest danger of crushing the bees by handling the frames with bees around the finger-ends.

Similarly in closing a hive the tops of the frames are again smeared with the solution prior to replacing the quilt, and it can then be done without crushing a single bee. By this simple method of opening and closing colonies it is performed with scarcely any disturbance or loss of bee life. The moistened feather streaked round the outside of a swarm when first thrown out makes them run away from it towards the hive pell mell, and the operation of hiving is accomplished in a very few minutes. The constant use of carbolic acid during manipulations will also prevent any stray spores of *Bacillus Alvei* (foul brood) being carried about and infecting other colonies, as it is a germicide of high value, not only killing the spores but the bacillus also. There are innumerable other purposes to which this article may be put in an apiary.



The "Old Reliable" as seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B. Rural, Toledo, Ohio.

Exchanging Supers, Bees and All

Exchanging two extracting supers, bees and all, is quite a heroic operation, as well as being time-saving, provided no hitch occurs. Interesting to see that it is done practically. But we note that Mr. Dadant does not consider the exchange of bees as a thing to be desired of itself. Bees are exchanged because it takes a great deal more time to shake off bees and exchange combs. Page 464.

Nursing Weak Colonies Over Strong

If you do succeed at nursing weak colonies over strong ones, why not add the Canadian *kink* from page 466? Let the weaker colony have the stand when the separation is made. If it is simply put back where it came from the loss of its flying bees will be a heavy payment for the nursing it got.

Number of Bee-Visits for a Load of Pollen

I protest against our saying off hand that a bee visits 50 blossoms before she has a load of pollen. By just such recklessness as this we oft make ourselves "*particeps criminis*" in much of the enormous bee-nonsense that goes round the newspaper press. Just as cheap to say 50 visits per trip might be called a *fair average* if that's what we mean. Answers all purposes just as well. Page 469.

Smartweed and Smartweed Honey

Better we don't say "smartweed" except in regard to the plant which is smartweed really, by the possession of acidity. On general principles smartweed honey should be only slightly flavored with the acrid principle when the yield is profuse, but much more so when the yield is small. The species resembling smartweed are

fine yielders of honey, smartweed itself a very poor yielder (if my observation is correct). Moreover, smartweed seldom grows alone; while the plants resembling it grow alone in vast acreage. So I suspect we shall never know what genuine smartweed honey is like—and it don't matter. Page 481.

"Light Brood" Comb Foundation in Texas

Why is this thus? Down in Texas, it seems, 8 sheets of foundation to the pound is "light brood." Last box of "medium brood" I bought was 25 sheets in a 3-pound box. Page 465.

Good B's that "Turn Up" Often

Ever and anon, at intervals of 10 years, that swarm of B's turns up—some old B's, and some new ones. This time they are mostly new. But enough of the old ones remain to prove that B's live longer than the 7 years allowed them by Virgil. As to the quality of these bees, they beat the Caucasians, I should say. These are Christian bees. Page 482.

The Government and Caucasian Queens

Dr. Bohrer strikes a good idea when he advises the government apiary to give away Caucasian queens *but make the conditions so severe* (isolation conditions) that only a few would be able to take them. Right persons get 'em then—and benefit to the public made much greater by preventing such a lot of mismated Caucasians.

Of course, no breeder has Cyprian blood octorooned into the Italian queens he sends out—O no! But Dr. B. notes how vicious temper turns up where Cyprians are experimented with near by. Page 483.

Pollen-Carrying a Test for Bees

Mr. Alley says he observes that one colony carries larger pollen-pellets than another. I rather think this is so. Does it betray the relative amount of interest the bees take in their work—the more the zeal the larger the loads? Queenless bees, with their don't-care-whether-school-keeps-or-not, are credited with the smallest loads of all. If this is all straight, we seem to have a very handy test to select by applicable both to bees and breeding queens. Plainly this test should be applied, if at all, only when bees are working *mainly* for pollen, not when they work *mainly* for honey and incidentally bring along a little pollen—most of them bringing none. In such a case a neighboring colony that happened to need pollen more might make a much better showing without being any better bees. Page 484.

Mr. Alley and His Queen Comments

Mr. Alley is specially qualified to say some of the things he says on page 484. "See that a queen puts but one egg in a cell, and that the eggs all cant the same way—point down." "When I find a queen whose eggs are small, and canted in all ways but the right way, her head comes off quickly, as such queens are worthless for any purpose." But it strikes me that his preference for big eggs might easily be run to extreme. The weight of eggs a queen may lay in one day, compared with the weight of the queen herself, is astounding; and there must be a limit to it somewhere. Suppose, then, for instance, a queen is laying say 2 grains weight of eggs per day. Two grains of extra-big eggs *wouldn't count out nearly so many* as two grains of normal sized eggs, presumably just as good.

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See Langstroth Book Offer on another page of this copy of the American Bee Journal.

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NATIONAL AT CHICAGO

Report of the 36th Annual Convention of the National Bee-Keepers' Association, held in Chicago, Ill., Dec. 19, 20 and 21, 1905

(Continued from page 601.)

Pres. Dadant—We will now take up the next subject by Mr. Holtermann, of Canada.

MIGRATORY BEE-KEEPING

Mr. Holtermann—As to migratory bee-keeping, there are those who carry it on in one sense, and, again, others who carry it on in another sense. I may say I have read more or less of the European bee-literature with profit, and in Europe migratory bee-keeping, the moving about from one section to another has been carried on to a greater extent than upon the continent, and I believe it is a line in which we can receive instruction from others; and after receiving hints and suggestions we can get from Europe, with all due respect to European bee-keepers, we in this country can improve upon their method as a rule, because we are practical to a greater extent.

First of all comes the question whether it shall be carried on at all or not. In my estimation every specialist should in a sense carry on bee-keeping in that way. Unless it be in a section of country foreign in nature entirely to my own and that which I find in the Northern States, no specialist should create permanent large apiaries to any extent. I find conditions vary from year to year so much that it is desirable for one who makes a special business of bee-keeping to be able to go to favored localities.

In our Province the year before this the clover was largely killed out; it had been killed out by thaws, snow and rain, and then the freezing in of the clover and smothering. I had intended to go to a certain section. I had my super-combs arranged for that purpose and I found out by going to a section of country where there was very rolling land I could get a fairly good clover locality, whilst if I had remained in the territory which I originally intended and had before gone into I would have had no clover surplus at all.

Again, you know the rainfalls vary in every locality. Even within a few miles you can go and get quite a difference as far as rainfalls go. In the heavy clay lands, if in the early part of the season, you get a shortage of rainfalls; it takes more rain to bring that ground into condition for yielding honey then it does upon the lighter soils; and one should be always ready to pack up and go from one section to another.

Again, I find if you get into a section of country where there are good early flows, that then you can not in that same section get good and heavy late flows, and for that reason for the specialist, if he can move an ordinary distance, say 40 miles, he can secure a larger yield, and in that case I would advocate the moving about of the bees. Each person must decide for himself after studying up the conditions, whether he shall practice this system of bee-keeping or not. To a certain extent, it is his own business as to whether he shall practice it or not, but it is everybody's business as to *how* he shall practice that. We have had some discussions in our American bee-literature as to the advisability of moving bees when the hives are open; and I feel very strongly upon this subject, as to whether he shall do it or not; and I do not hesitate to say, after years of pretty extensive experience in moving bees, that it is a very great mistake to attempt to move bees with open hives. You know that as far as bees are concerned, they rarely do any harm as far as life is concerned; that if anywhere upon this continent a life is lost through the stinging of the bee, it passes through the whole press of this continent; whilst with other

live stock there are so many accidents happen, and they are so common, that the incident is not mentioned, or is only of local interest.

Now, I know what I am talking about, because my system gives me a chance to know just what bees will do as to coming in and out of an entrance. I am willing to admit, if you get your bees started safely and are on the move, the bees are not likely to come out. But I also know that you never know at what moment you may have to stop, and then, when you start again, you do not know whether you are going to get into trouble or not.

I have a permanent portico upon this hive; it may be attached to any hive. At the entrance of my hive a screen is slid down in front, and I know just *exactly* how the bees will act when the entrance is open, or is not open. When we first start the bees will come out; they pass really out of the hive and come to the entrance and will circle about in the screen, in that portico, depending upon the temperature and strength of the bees, and so on; they will either stay there or go in again; and you can go along the road and see, perhaps, sometimes, no bees outside of the hive; but you stop, and then jar your wagon, or whatever you have, and start up again, and that is the time when the bees come out and the time that the danger exists. Now, in moving bees we want to have everything arranged as expeditiously as possible; we want to be able to pack up and move at any time, and the device I have at the front of the hive is with that object in view. I have found the matter of screening bees in the hive, or by having screens above or below, is a very different thing in principle, to having a screen out at the front, the way I have it. When the hive is barred, the bees can come out of the entrance; they don't seem to feel the confinement in the hive and they act in a different way from what they do if the screen is close to the



R. F. HOLTERMANN.

brood-chambers. With the ordinary entrance the bees in their efforts to get out, pack against that screening and shut off ventilation. In this system, when we are going to move, we put on the screens during the daytime and the earliest moment at which you can get away in the evening

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is the desirable one. If you can close your hive, and load up, and get away, before dark, you are a great gainer of time. So, in practicing this system of moving about, we put in the screen in the hive in this way, then, towards evening, when the bees begin to discontinue flying, we take the colonies, those that are the earliest ones to quit, and we simply drop the screen in place, put a tack here, and the operation is finished; and in ten minutes we can have our bees loaded and move away. We load upon hay-racks because they are available at almost all times, and it is a very nice way to load them. We put three across in the wagon and put plenty of hay in there; and by means of the rack and hay or straw we get sufficient spring to keep the comb from breaking down. We load them up with one row in the center, and one either side, and move away. In such a way I have tried to plan to do this work as expeditiously as possible. I have no bee-space in the top of the hive. And I think you will find it an advantage in having it below rather than above. In our practice we must simply and quietly judge by what means we can get the largest number of advantages to suit our own case, and then adopt that. And for that reason, after carefully weighing, I decided on not having a bee-space above, but rather below; and through the screen excluder, or super, or cover, what ever it is, by not having the bee-space above, even if you have not got frames where the sides are self-spacing, you can keep them from rocking.

Our covers are arranged in this way: I don't intend to blame the supply dealers. A supply dealer cannot waste his energies in educating bee-keepers; he has to use his energies in supplying goods and putting them upon the market, and he can't go ahead of public opinion. As long as bee-keepers are content with a $\frac{3}{8}$ -inch board cover so long he must give it to them. The cover which I use here is a $\frac{3}{8}$ -inch board with a $\frac{3}{8}$ -inch lining, and this is filled with felt paper, which is a great non-conductor, and is of very great use in either cold or hot weather. This is a felt underneath which I imported from England for the purpose. It is tacked on the cover and it rests on the hive; and then we have this galvanized-iron top which is good for 25 years. It costs more, but eventually it is cheaper; having put that cover on, by simply driving a nail at either side it is closed. Of all the things I have tried I have so far succeeded in getting no better method than a very crude one, and that is simply the stripping up the sides of the hives in order to connect the upper stories and the brood-chamber. This year I moved bees 4 or 5 times during the hottest time in the summer—August.

For several years I moved with two supers on quite frequently, but the most practical method I have found so far—I haven't succeeded with clamps—is simply to strip up with a lath—one on each side and one at the back, in order to keep the different things together. In doing that there is more or less of nail driving.

Dr. Miller—Do you object to the common staples?

Mr. Holtermann—I have used those. I have never had any accidents with them, but after using them I came to the conclusion that it was not quite safe enough for me, so I abandoned them again and used the lath. A hive might get broken up. I don't want anything to happen, and that is the reason why I left the staple and used the lath.

Dr. Miller—I have used both the lath and staple for years, and I have had more trouble with the lath coming loose than the staples.

Mr. Holtermann—That is a matter you will have to decide for yourselves. I want to say to those of you who have not practiced this moving about of bees, if you want to know what hard work is, begin that line of business. In my estimation, to simply set down the bees and run them for one season in one place is play, when you compare it with what you get when you have to move your bees about, and perhaps be up all night some times, and carry on the business in that way. But in my estimation there are many localities where you can get much better results by moving them. No one should do it unless he knows *how* to do it, and follow it up carefully and watchfully.

In moving, the bees get restless in hot weather, and perhaps you have seen them, when they were screened, with their tongues out through the screen. Now, we water our bees, and in moving them I think it is exceedingly important. Give the bees sufficient, and you will be surprised how they will quiet and cool down under those circumstances.

I also find a peculiar characteristic of the Italian bees

in this respect, and that is this: Of the blacks, hybrids and Carniolans and Italians, the Italians I found were the only bees, when they got very restless or very excited and began to run about, that would actually turn upon one another and sting one another to death right in the hive; but by watering you can always stop that, and overcome these difficulties. I believe by not watering them you might have very disastrous results by having them destroy the brood. The time will come when they will suck the food from the young larvae, and in a very short time destroy a number of young bees.

Mr. Abbott—How many pounds of honey do you get from your hives from those 5 moves?

Mr. Holtermann—In the Farmers' Institute, when they asked that question, I replied by asking them, How much milk do you get from your cows?

Mr. Abbott—I get about 2 gallons from mine.

Mr. Holtermann—It is a very long and interesting study. Clover does well upon clay soil. I don't believe under proper conditions there is any soil it will do as well upon. When you turn around again to buckwheat, I used to say, the better the soil the more yield you will get from the blossoms. It depends upon the nature of the blossom. You have got to get down to the kind of soil that the plant will do best upon. This year has been an exceptional year for me. I have had from 296 colonies of bees over 60,000 pounds of honey, and I have done no feeding. My 12-frame Langstroth hives will average 85 pounds going into winter quarters. But I don't want this convention to think, and Mr. Abbott knows well it is a question you can't answer—to get the best results out of it, you have to be a careful observer.

Mr. Abbott—On a chance estimate what would you get? 200 pounds?

Mr. Holtermann—No, not when I say this was an exceptional year with me. But I think the members of the convention here will justify me in saying that I could not give an honest and sincere answer to that question.

Dr. Miller—Do you use the cover altogether, regularly, in that way?

Mr. Holtermann—I use it regularly in that way.

Dr. Miller—Will you give us about the cost of the two parts?

Mr. Holtermann—This thickness of galvanized iron can be bought for a 12-frame hive, made up, for about 17 cents. The rest of the cover would be about the cost of your hive; and the felt paper, you will have a pretty good idea of what felt is worth in your country. I don't want you to figure that cost with a $\frac{3}{8}$ -inch ordinary board. In the spring of the year there is heat escaping from that, and you know how often, if there is a lot of frost, you find that no frost has fallen upon the cover, and that indicates the heat is passing off from that cluster at that time of the year; it is a very expensive cover, if that is the case, because you are not only using honey that is required to produce that heat, but the vitality of the bee is being exhausted. If that were all it would be sufficient, but, more than that, you are curtailing the capacity of those bees by using that kind of cover.

Dr. Miller—If there is any part of the hive that I would not economize on it is the cover.

Mr. Holtermann—When you go into the dairy business you are not looking around for \$25 cows, but for the cows which for the least amount of food and looking after will give you the greatest returns; and just so soon as bee-keepers will look at matters from that standpoint, so soon will the supply dealer give them something better than he is giving them today. There are little unevennesses in your combs and quilt, and so on, and if you have a plain wooden cover over them there must be more or less spring out at the sides. With this soft felt there is sufficient "give" to it to overcome this unevenness, and the cover fits down more closely.

Mr. Putnam—Did you ever use wool-twine to tie around to hold the hive together?

Mr. Holtermann—No, I have read of it, but I wouldn't want it. When I start I want to be sure I am not going to have any accidents.

Mr. Abbott—I was thinking while Mr. Holtermann was talking about the people who were interested in that kind of thing, how many there were of them, and how practical it was; and I tried to get at the practical side of it by getting a direct answer from Mr. Holtermann. Now, while it may be applicable in Canada, I wanted to see if it would work in Missouri. I know how much honey we get down there with-

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out migrating, and simply sit down and stay there. I migrated for about 20 years of my life, and I was sick, and \$150 worse off than nothing, until I sat down and began to do things, and then I found myself in better condition. It was a question with me whether this migratory bee-keeping might not be an expensive amusement.

Mr. Holtermann—It would be very expensive if it were an amusement.

Mr. Abbott—I wanted to find out whether Mr. Holtermann was pursuing this line of action simply because he found satisfaction in it, and was solving problems he wanted to solve, or whether he believed it was of practical utility to all the bee-keepers in the United States and Canada. Down in Missouri we can get from 150 to sometimes 250 pounds of honey from a single colony of bees if the clover yields well. When there was plenty of basswood, 150 or 200 pounds was nothing. Now if Mr. Holtermann doesn't get more than that it seems to me it would not be practical for us to move if we would only get honey to the extent he would get. He said all of this boxing-up business, and so on, would be ready in ten minutes, but I question if he can get ready to move for less than a dollar per hive every time he moves.

Mr. Holtermann—Did you have this kind of device?

Mr. Abbott—Yes.

Mr. Holtermann—I doubt it.

Mr. Stewart—I moved 90 colonies of bees 7 miles a year ago last fall, and it cost about \$10. I moved them out of a location where there was no possible show of their getting any surplus honey at all. I got from that apiary 1,500 pounds of honey after I moved them. You can figure whether it paid or not.

Mr. Holtermann—I have been practicing this for 4 years, and if I am in the bee-business another 4 years, and have the necessary health and strength, I shall likely practice it. I keep a careful record of all my expenses, and I know at the end of the year what I have.

Mr. Baxter—I know in Illinois that the moving of bees has paid under certain circumstances. I have seen it done.

Dr. Miller—I would not be fool enough to spend money moving bees 5 or 10 miles in any direction, no matter whether I got at home 50 pounds or 150 pounds, because I wouldn't gain anything by it. There wouldn't be anything more to get where I moved them. But it is not a question whether at home I got 150 pounds or 20 pounds, it is a question as to whether I get more somewhere else. Now, if there is somewhere that I can go to where there is a yield of honey and none at home, I might make money by moving, even if I were to have 150 pounds at home.

Mr. Abbott—It is all right to discuss these things, but is there anything in it for the great mass of bee-keepers?

(Continued next week.)



Send Questions either to the office of the American Bee Journal, or to Dr. C. C. MILLER, Marengo, Ill.
 Dr. Miller does not answer Questions by mail.

Renewing Brood-Combs—Stores for Winter—Chunk Honey vs. Section Honey

1. How many years can bees use comb in the brood-chamber before it should be cut out and new comb built?

2. How late in the season can bees build comb? Bee-keepers here say not after the middle of July.

3. Will a single Danzenbaker brood-body hold enough honey and brood to winter safely here?

4. Will my bees store more honey in shallow extracting-frames (that is, chunk honey) than in sections? NORTH CAROLINA.

ANSWERS.—1. I don't know. I've seen instructions to have comb renewed every 3 or 4 years; but in my 45 years' experience I have never yet rejected good, straight worker-comb merely because it was old. I don't see but the oldest combs I have are all right yet.

2. I suppose they can build comb any time; at least I've known them to do it in winter; and they will probably build it any time it is

needed. Certainly comb is often built after the middle of July; as, for example, the comb built for buckwheat honey.

3. If the combs are well filled it ought to be a plenty.

4. Probably they will.

Catnip Honey

Finding that catnip does well here, and finding the honey is bitter, I want to ask whether or not the honey will sell; and where and to whom, and at what possible price? GEORGIA.

ANSWER.—Catnip has the reputation of producing honey of good quality, and it must be that the bitter honey comes from some other plant that is yielding at the same time. Bitter honey is of course unfit for table use, but it can be sold for mechanical purposes at not very much less than good dark honey, probably through any commission-house at your nearest large city. Unless you have a very large quantity of it, your best plan may be to feed it in spring and have it all used up in making brood.

Color of Caucasian Bees

I have read different accounts about Caucasian bees, but had never seen any until the other day a gentleman who breeds them showed me some. They looked like the Italians, only the dark stripes seemed a little blacker. Now, if I read rightly, it stated that the Caucasians were a little darker than the black bees. How can I tell them from other bees? MINNESOTA.

ANSWER.—It is not likely that any one can give in words a description so exact that by that description alone one who has never seen a Caucasian bee can make a definite decision. There are said to be lighter and darker Caucasians, so that, like other bees, you are not to expect all to be alike. I can give no description better than given on page 250 of this journal, by Rev. Lyon and Prof. Benton, as both of these gentlemen are familiar with Caucasians.

A Beginner's Questions

1. If one should place a super of sections on a strong colony, the sections mostly filled with comb from which the bees had taken the honey the year before, and when they got them partly filled with honey (but not capped), and one should raise the super and place under it a super of sections with only starters, would there be any danger of the bees carrying the honey from the upper super to the brood-frames below?

2. How long after the prime swarm is hived before there will be young bees hatching?

3. How long after a virgin queen is hived with an afterswarm before she will be laying?

4. Does it hinder the bees from putting in honey to have a drone-trap on the hive?

5. Is it any harm to destroy the drones the first part of the season when there are lots of them? or would it be better to let them live until after swarming is over?

6. Is there any danger of blood-poisoning from the stinging of bees? MAINE.

ANSWERS.—1. The bees would carry no honey from the upper super into the brood-chamber unless the super should be left on after the close of the harvest, and they would make very slow work about it then. I do the very thing you mention every year.

2. It takes 3 weeks from the time an egg is laid until the young worker emerges, so it will be 3 weeks from the time the swarm is hived until the first young bee emerges, if the queen should begin laying immediately after the swarm is hived; and it will not be long after the hiving before she begins to lay.

3. A week or so.

4. Not seriously.

5. In the average apiary there will probably be enough drones left after you have made the attempt to kill them all off. Prevention is better than cure; so it is better not to have drone-comb in any hives except in a few where your best honey-gatherers are.

6. I don't believe so.

Few Drones with Transferred Bees—How Often to Renew Combs

1. I had 4 colonies in box-hives which I transferred to movable-frame hives last spring by drumming most of them out, and then after 3 weeks to a day I drummed out the hatched and nest, emptying the boxes. They were fair-sized colonies, and at the first drumming about an equal amount was drummed out of each box—all workers and the queen of each; at the second drumming 3 boxes gave about an equal amount—all workers; but the fourth box had at this time about 3 or 4 times as many workers and about 20 husky drones. Is there any significance in this? Should the others also have had drones?

2. I put them all in 10-frame, full-sheet, wired-foundation hives, and would like to know how many years these frames with comb may be left in the hives before they should be replaced by new foundation? ILLINOIS.

ANSWERS.—1. It is not likely that there was any special significance in the fact that no drones were present at first drumming and only in

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one colony 3 weeks later a few, unless it be that it signifies that you did the transferring earlier in the season than most would think advisable. For in box-hives in which the bees build comb at their own sweet will, there would pretty surely be a good proportion of drone-comb, and just as surely drones would be present unless the transferring were done very early. There would have been no advantage in having drones in the other 3 colonies.

2. I don't know how old your comb must be before it needs renewing. You see I've been keeping bees only 45 years, my first bees were in box-hives, and I'm not sure that I have now any combs much more than 30 years old. They are all right yet, and look as if they were good for 30 years more.

Management of Old Colony and Swarms

I have but one colony of bees, and have had one for two years. The one I have is a year old. I would like to know what to do. The bees are not working in the sections for comb honey. I put them out last spring with a nice lot of honey, and they worked well all through the bloom, for they must have filled it below, and swarmed twice, the first one coming out the first day of June.

I also have some sections in the hive that have comb in them, left from last year, all clean and white. What can I do to make the bees work in the super? The hive-entrance is about 7 inches wide. I do not know whether they are being robbed or not, for they seem to be very quiet, and always go in and out in a hurry. The hive faces east. They get the morning and evening sun, and are shaded the hottest part of the day. Ought I to change their place since they swarmed? If so, what distance? It is a strong colony.

WISCONSIN.

ANSWER.—You say your colony has swarmed twice, but don't say anything about what you did with the swarms. In the absence of any more information, it is a pretty safe guess that you merely hived each of them in a separate hive, leaving the old hive on the old stand. That would weaken the old colony so much that you ought not to expect it to do any storing in supers unless the season should be unusually good and continue late. Even if it lost the force of only one swarm, it would be weakened too much to do any storing in supers for a good while, if indeed it stored any at all, but after two swarms having left it, nothing in the way of storing should be expected. Moving the hive now would do harm instead of good.

All the foregoing is true in a good season, but the great probability is that the season is very poor with you, as it is this year with many others in Wisconsin, and also as it is here. My bees have not been weakened by swarming, but they are not doing a thing in supers. There is clover in plenty, but the bees don't seem to get any nectar from it.

So don't be discouraged if you don't get a pound of surplus this year; next year may be a good year. Let me tell you how to do another year: When the bees swarm, set the swarm on the old stand, and set the old hive as close to it as you can; no harm if one hive touches the other. After a day or two set the supers from the hive on the new one (for the likelihood is that you had supers on before it was time for swarming.) About a week after swarming, move the old hive to a new stand, perhaps 8 or 10 feet away. The result of that will be that the field-bees that leave the old hive, upon returning with their loads from the fields, will join the swarm, making it very strong, and you will get a lot of surplus from it. All that ought to be expected from the old colony is that it build up strong for winter.



Bees Have Done Well.

Bees in this part of the country have done very well so far this year. They have been working on white clover since the forepart of May.

Everton, Mo., June 25. J. T. CANTRELL.

Pays to Look After the Bees.

My bees are fine. I wintered them in the cellar and did not lose a colony. Some of them have the second super. I find it pays to look after the bees early in the fall, as I did mine, and see that they are all right, with 20 pounds of good, capped honey for winter.

WM. MATTHEWS.

Lancaster, Wis., June 21.

Honey Prospect Not Encouraging.

The prospect for honey in this section is anything but encouraging so far this season. The spring has been so wet, cold and windy that the bees could not fly. The first crop of alfalfa is already cut and stacked, and the bees have not begun to work in supers yet. There is very little prospect of their gathering from raspberries or any other fruits. The only chance they have is to get something from sweet clover, and possibly from the second crop of alfalfa. The loss from cellar-wintering was greater last winter than from those wintered outdoors.

V. S. JOHNSON.

Spearfish, S. Dak., June 29.

Honey Scarce During Rain.

Honey has been coming in well up to within a week, but now it is rather scarce during so much rain.

E. G. GUTHREY.

Malta Bend, Mo., July 4.

A Bumper Honey Season.

Of all the seasons I ever saw here this is a bumper. Season after season has passed and never have I taken more than 2 supers from the best of colonies during the summer season, although I have taken as much as 5 supers (164 pounds) from the Spanish-needle in September. But for the past 8 weeks the bees have been pounding away—well, slow but sure. Rain about the first of June gave clover a fresh start, and now the horsemint is in bloom. All but 2 or 3 colonies have 2 supers each, several have taken 3, and a few bid fair to take the fourth, with wood-

sage, sumac and buckberry yet to come. Usually buckberry yields well. I haven't extracted any honey yet. I have had but 2 swarms, and no guessing. They are busy, and so am I.

CHAS. M. DARROW.

Milo, Mo., June 18.

May Get Some Honey Yet.

The last 10 days were the best days of 1906 for the busy bees. They have gone to the supers very nicely. It was too cool and wet before. We may get some honey yet.

W. K. BATES.

Stockton, Minn., July 3.

Croton Plant.

I send a flower that a friend gave to me a week ago, and nobody knows its name. If the bees work on it the honey would be perfumed so nice. What is the flower?

Seneca, Ill., June 26. A. J. DIEBOLD.

[The name of the plant is Croton—Croton monanthogynus—and belongs to the Spurge family. The perfume collects in glands throughout the plant and not in the honey-sacs exclusively, so the honey would not be scented very much. As the Spurge family is not noted for its sweetness, it is probable that the Croton plant will not prove of much value to the bees.—C. L. Walton.]

Satisfactory Honey Crop.

The honey crop is very satisfactory this season, and of exceptionally good quality—pure white clover.

A. H. NOBLE, SR.

Nashville, Tenn., July 5.

Earthquakes and Honey.

This season hereabouts has been the best for honey I have known since 1893. My regrets are that I did not take up the care of the bees in time, else I might have made a record-breaking harvest of honey. The rains were spread over a large stretch of the season—the latest heavy rains I ever knew fell the last of May. The flowers are numerous, and will last a long time. The bees have not swarmed badly—one reason being a good many colonies did not breed-up fast owing to being weak from the poorness of last season, and the lateness of the spring.

I will write of earthquakes and honey—not that the former produce the latter, or the latter the former. Let me propound a query: Is an earthquake country a good honey-producing country? Let's vote it on to Dr. Miller. I can say, "I don't know." Can't he do better?

What caused me to propound this question is this: I am in a good portion of the burned San Francisco almost daily, and being somewhat of an observer by training and otherwise, I note what is going on there, besides seeing the remarkable grit of its citizens in clearing

off and rebuilding their city. The Golden Gate City was burned on April 18-20; little was left standing, especially vegetation. On the heels of the fire came a heavy rain, and a few weeks later a still heavier one. Now, what is remarkable, weeds spring up everywhere, excepting in the late business section which is covered with brick, stone and iron debris. A week ago I noticed that some of this phoenix or salamander-like (just as you wish to call it) vegetation is in bloom. How's that for quick flowering? About 6 weeks from the seed, and most of these flowers are yellow—California's golden color. And best of all, they are one of our best early honey plants—the sort that blooms in December, January, etc. They are of the turnip or rape family, with a small sprinkling of mustard. Some alfalfaree, too, are coming into bloom.

I did not go to the city the past 2 days. Yesterday opened up gloomy; in the afternoon it commenced to rain, and during the night it was quite a downpour. You see we have been having an unusual amount of rain, and at unusual seasons.

What do you think? We had another quake some time during the night. It was quite a respectable one, and I guess it woke me up, though I am not sure on that point. We have had a lot of 'em since the big shake-up, and don't mind 'em a bit.

Oakland, Cal., June 16. W. A. PRYAL.

Figwort.

Herewith you will find a sprig from a plant a few stalks of which I find near my backyard. I suppose I ought to know what it is, but I don't, so send it to you for information. The bees are absolutely wild to get to the little flowers, a few of which may be seen on this branch.

Wm. M. WHITNEY.

Lake Geneva, Wis., June 29.

[The plant in question is the Figwort—Scrophularia nodosa—so-called because a reputed remedy for scrofula, and a good honey-plant, too. It is a good idea to allow this plant to grow in waste places around the backyard as it yields a good quantity of excellent nectar.—C. L. Walton.]

GOLDEN AND LEATHER-COLORED ITALIANS.

Price of Golden Queens. Before July 1st: Untested, \$1 each; 6 for \$5; 12 for \$9. Warranted \$1.25 each; 6 for \$7; 12 for \$13. Tested, \$1.50 each. Select Tested, \$2. After July 1st: Untested, 75c each; 6 for \$4; one dozen, \$7. Warranted Tested, \$1.25 each; 6 for \$7; one dozen, \$13. Tested, \$1.50; Select Tested, \$2; Breeders, \$5. Caucasian Queens will be ready to mail July 1st: Untested, \$1 each; 6 for \$5. Warranted Tested, \$1.40 each; 6 for \$8.

We have three yards—two Italian and one Caucasian—and mean to meet the demand of the trade. Prices of Nuclei on application.

294tf D. J. BLOCHER, Pearl City, Ill.

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Tennessee-Bred Queens

All from Extra-Select Mothers

3-band from Imported Dark Leather, Moore's Long-Tongue, or my own. Golden from Laws, Doolittle's or my own. Caucasians and Carniolans from direct Imported.

AFTER APRIL 15TH.

Italians Before July 1st				After July 1st			CARNIOLANS			CAUCASIANS		
	1	6	12	1	6	12	1	6	12	1	6	12
Untested	\$.75	\$ 4.00	\$ 7.50	\$.60	\$3.25	\$ 6.00	\$.85	\$ 4.50	\$ 8.00	\$.95	\$ 5.00	\$ 8.50
Select Untested	1.00	5.00	9.00	.75	4.25	8.00	1.10	5.50	9.50	1.20	6.00	10.00
Tested	1.50	8.00	15.00	1.25	6.50	12.00	1.60	8.50	15.50	1.70	9.00	16.00
Select Tested	2.00	10.00	18.00	1.50	8.00	15.00	2.10	10.50	18.50	2.20	11.00	19.00

Straight 5-band Golden Breeders	\$10.00	1-frame Nucleus (no queen)	\$1.50
Select Golden Breeders	3.00	2-frame " "	2.00
" 3-band "	3.00	3-frame " "	2.50
" Carniolan "	3.10	4-frame " "	3.00
" Caucasian "	3.25	1 full colony without queen in 8-frame dovetailed hive	6.00

Bees by the pound in light shipping-boxes, \$1.00 per pound.

Select the Queen wanted, and add the price to the above prices.

Discounts on large orders. Contracts with dealers a specialty. No bee-disease has ever been in this section.

13Dtf

JOHN M. DAVIS, Spring Hill, Tenn.

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CONVENTION NOTICE.

National in Texas.—The National Beekeepers' Association will hold its annual convention Nov. 8, 9 and 10, 1906, in San Antonio, Texas. These dates occur at a time when the Texas Fair is in progress, and low rates will be in force, locally, for several hundreds of miles out of San Antonio, and, at the same time, there will be home-seekers' rates available from other parts of the country.

Flint, Mich. W. Z. HUTCHINSON, Sec.

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and return, via Nickel Plate Road, July 27th, at \$14.00 for the round-trip, from Chicago. Return limit August 28th. Chicago City Ticket Office, 107 Adams Street. La Salle St. Station, the only depot in Chicago on the Elevated Loop.

15—29A2t

CAUCASIAN QUEENS!

I can furnish a limited number of Queens of this popular variety, bred from a Tested Queen sent me by the Agricultural Department, all mated in a mating yard away from all other bees, so that all of my Queens will be almost sure to be purely mated. These choice Queens only \$1.00 each.

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TWIN NUCLEUS AND MATING BOX has control of the queen by a 3-hole wheel on the outside, with one hole wire-screened, one hole covered with queen-excluding zinc, and the third hole to regulate the size of the entrance. (Patent applied for.) Price, \$1.00.

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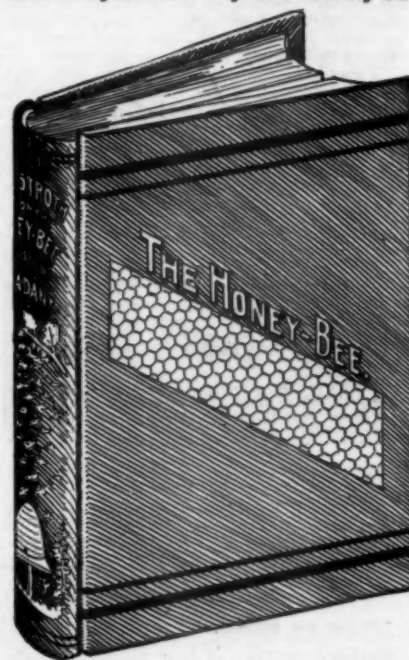
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Our prices are very reasonable, and to convince you of such we will mail you our free illustrated and descriptive catalog and price-list upon request. We want every bee-keeper to have our Catalog. **SPECIAL DISCOUNTS** now. Write to-day.

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TOLEDO

Will save you money. We will buy your Honey and Beeswax, and pay highest market price. It will pay you to correspond with us when your crop is ready to market. No shipment too large for us. Carloads a specialty.

QUEENS! QUEENS! QUEENS!

We have a yard at Toledo with 100 colonies and over, which we use for queen-rearing only, besides several out-yards which we run for honey; also for extra bees. Brood and queens are mailed the same day order is received.

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To any one asking for it. No matter whether you keep one colony or 500. We also handle a large line of Poultry Supplies, and sell Eggs for hatching. Our 1906 mating list is sent with every catalog. Don't buy until you have seen it.

GRIGGS BROTHERS, 521 Monroe St., Toledo, Ohio

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Wisconsin Basswood Sections And Prompt Shipments

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Queens A fine Honey-Gathering Strain of Italians and Carniolans, at 75 cents each; 3 for \$2; 6 for \$3.50; or \$6.50 per dozen, for Untested. Tested, \$1 each, or \$10 a dozen.

GEORGE W. BARNES,
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—NOW READY—
ITALIAN AND RED CLOVER QUEENS
I guarantee safe arrival and perfect satisfaction. Untested, 60c; select untested, 75c, or \$8 per dozen. Tested, \$1 each, or \$10 per doz.
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Rose Lawn Queens

Italians—Carniolans—Caucasians

We thank our friends for the liberal patronage extended to us, and beg to announce that we have largely increased the capacity of our queen-rearing yards, and will be prepared to fill orders promptly after July 1st.

Our prize offer on honey production is extended to Oct. 1st for those who wish to try our "Pure Gold Queens."

We call special attention to the superior qualities of our Red Clover Italians and Yellow Caucasians which are worthy the attention of progressive bee-keepers.

PRICES AFTER JULY 1

Italians and Carniolans, Select, Untested, 75 cents; six, \$4.00.

Caucasians, Select, Untested, \$1.00; six, \$5.00.

Bauat Queens for those who wish them.

Special prices for larger orders and breeding stock will be given on application. Write for Catalog.

ROSE LAWN APIARIES,

22A1f STA. C. LINCOLN, NEB.

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Italian and Caucasian BEES, QUEENS, AND NUCLEI

Choice home-bred and imported stock. All Queens reared in full colonies.

Prices of Italians in JULY AND AFTER:

One Untested Queen \$.65
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" Select Tested Queen 1.10
" Breeding Queen 1.65
1-comb nucleus (no queen)80
2 " " " 1.40
3 " " " 2.00
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1 Tested " " 1.75

Safe arrival guaranteed.

For prices on larger quantities, and description of each grade of queens, send for free catalog.

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A special discount is offered on all Queens and Bees ordered to be delivered before the close of the season of 1906. Pure stock, pure mating, and excellence in grade guaranteed. Address.

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Queens Now Ready to Mail

None better at any price. Untested at 50c; Warranted at 75c; Tested at \$1.00. Discount on quantity.

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Choice Queens

Caucasians—Untested, 75c; Tested, \$1.00. Italians and Carniolans—Untested, 60c; Tested, 75c. A postal card will bring my circular and full price-list for 1906.

CHAS. KOEPPEN,

26A18t FREDERICKSBURG, VA.

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Send me for 3-months subscription to the weekly **AMERICAN FANCY** and get beautiful color picture \$1.00 of the noted Buff Plymouth Rock that cost \$750 **AMERICAN FANCY**.

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Has increased so much that we were forced to double our melting capacity in order to fill orders promptly!

There is a Reason for This—It is because DITTMER'S FOUNDATION is tough, clear, and transparent, and has the natural odor of beeswax.

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Our warehouse is well stocked with all kinds of Bee-Keepers' Supplies.
Beeswax always wanted.

GUS DITTMER, Augusta, Wis.

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If it is, you should write us before buying. We not only make the BEST SECTIONS, but our patented specially-constructed machines, built exclusively for us, enable our Sections to be folded without wetting. That means 25 percent less breakage, and consequently 25 percent saving to you. Our prices are no higher than others. Let us quote you.

Special prices on immediate orders.

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If you want Sections that you can put a full sheet of foundation in 4 sections at once; or any other Bee-Supplies, send for Catalog to

20Atf A. COPPIN, Wenona, Ill.
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Original Direct Draft
CLEAN
Bee Smokers

4 Largest Sizes Soot Burning

Never Go Out
And last from 5 to 21 years

OTISVILLE, PA., Jan. 18, 1904.

Dear Sir:—I have tried almost everything in the smoker line; 3 in the last 3 years. In short if I want any more smokers your new style is good enough for me. I thank the editor of Review for what he said of it. Those remarks induced me to get mine. FRED FODNER.

No. 1 SECTIONS, per 1000, \$4.20; No. 2 Sections, per 1000, \$3.70. Root's Dovetail and Danz. Comb-Honey Hives, and all kinds of BEE-SUPPLIES at factory prices. Berry Boxes, etc. Italian Queens.
26A13t H. S. DUBV, St. Anne, Ill.

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Sent on receipt of price per mail.
T. F. BINGHAM Farwell, Mich.

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Queens from our fine strain of 3-band Italians will not disappoint you; bees are gentle and the best of honey-gatherers. Queens are large and prolific, and every one guaranteed. Untested, 50c, 86 per doz. Tested, \$1 each.

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Are now booking orders for QUEENS. PRICES:

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JAMESTOWN, N. Y.

Honey and + Beeswax +

CHICAGO, July 9.—Market is practically bare of comb honey, and while a little sells at about 15c for the best white grades, there is little volume to the trade. Extracted is in some demand at 6@7c for the best grades, but off flavors are about unsaleable at 5@5½c. Beeswax selling upon arrival at 30c. **R. A. BURNETT & CO.**

TOLEDO, Feb. 19.—The market for comb honey has been better for the past two weeks than at any time during the past season. Prices are firm on account of the scarcity. We are getting 15@16c for fancy white clover; 14@15c for No. 1, and 13@14c for amber. Buckwheat, 13c. Extracted honey is in good demand at following prices: White clover in barrels brings 6½@7c; amber, 5½@5¾c; in cans every grade from 1@1¼c higher. Beeswax is firm and in good demand at 28 and 30c.

The above are our selling prices, not what we pay. **GRIGGS BROS.**

INDIANAPOLIS, July 6.—Fancy white clover comb brings 16c; No. 1, 14c; demand exceeds the supply; fancy white western comb brings 14@15c; amber grades in poor demand at 12c. Best grade of extracted honey brings 8½@9c in 60-pound cans; amber, 6c. Good average beeswax sells here for \$33 per 100 pounds. **WALTER S. POWDER.**

PHILADELPHIA, July 9.—Advices from different points are rather conflicting regarding the crop of honey this season, and consequently, there is no market price established. Some new arrivals of comb honey selling at 13@15c, according to quality, and extracted honey at 6@7c. Beeswax firm, 28c.

We are producers of honey and do not handle on commission. **WM. A. SELSER.**

NEW YORK, July 10.—We still have some demand for comb honey, mostly for white grades, which sells at from 13@14c, according to quality. A very limited demand for light amber, with sufficient supply, and prices ruling at about 12c. Extracted in fairly good demand, with sufficient supply to meet all requirements. Quite some arrivals from the South, and common grades are selling at from 50@58c per gallon, and better grades at from 60@65c per gallon. California strong, and white is selling at from 7@7½c, and light amber at from 6@6½c. No near-by honey in the markets as yet. Beeswax steady at 30c per pound. **HILDRETH & SUGELKEN.**

Headquarters for Bee-Supplies

Complete Stock for 1906 now on hand.

FREIGHT-RATES FROM CINCINNATI

are the **LOWEST, ESPECIALLY**
for the **SOUTH**

as 'most' all freight now goes through Cincinnati.

You will Prompt Service is what I practice.
Satisfaction Guaranteed.

SAVE MONEY BUYING FROM ME.

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Send for same.

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Order for

QUEENS

LANE, RED CLOVERS and CAUCASIANS.

bred in separate apiaries,
the **GOLDEN YELLOWS, CARNIO-**

For prices, refer to my catalog, page 29.

C. H. W. WEBER

CINCINNATI
... OHIO ...

Office and Salesrooms, 2146-48 Central Ave. Warehouses, Freeman and Central Aves.

CINCINNATI, June 15.—The demand for extracted honey has brightened up within the past 30 days. However, there is so much of last season's crop still unsold, which tends to hold down the price. There is no material change in prices since our last quotation. We quote amber in barrels at 5@6½c. No new white clover extracted honey on the market as yet. New crop of comb honey finds ready sale at 14@15½c. Choice yellow beeswax, 30c, delivered here.

THE FRED W. MUTH CO.

DENVER, Feb. 5.—Owing to the mild weather the demand for honey has not been as good as usual at this time of year. We are quoting strictly No. 1 white alfalfa comb honey at \$3.35 to \$3.75 per case of 24 sections; off grade and light amber at \$3 to \$3.30. White extracted alfalfa in 60-pound cans, 7½@8½c; light amber, 6½@7½c. Beeswax, 24c for clean yellow.

THE COLO. HONEY-PRODUCERS' ASSN.

KANSAS CITY, July 5.—The honey market here is almost bare and there is very little new stock coming to market. On account of the poor wintering of the bees, very little honey has been gathered. The market for the best white honey in 24-section cases is \$3.25@3.40 per case; amber and other grades are 25@50c per case less. There is no new extracted honey on the market, but a little old is selling at 5½@6c, but scarcely any demand. We look for a good demand later. **C. C. CLEMONS & CO.**

CINCINNATI, March 7.—The demand for comb honey is slow, prices obtained are the same. Stock on hand seems to be sufficient to supply the wants. Quote fancy white, 14@16c. Amber extracted in barrels, 5½@5¾c; in cans, ¼c more; fancy white clover in 60-lb. cans, 7½@8½c; Southern, equal to white clover in color, from 6½@7c. Bright yellow beeswax, 30c.

C. H. W. WEBER.



Wanted

To sell lot of 300 empty 60-lb. capacity Honey-Cans. All in one lot, or less quantities. Cans are in first-class condition.

We are also in the market for Fancy Comb and Extracted Honey. Correspondence solicited

Michigan White Clover Honey Co.

AGENCIES: **DETROIT, MICH.**

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R. A. BURNETT & CO.

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26A4t Rt. 1. COMSTOCK, NEBR.

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Write for prices. State quantity and kind wanted. Samples free.

BEESWAX—Will pay Spot Cash and full market value all the year. Write us when you have any to dispose of.

HILDRETH & SUGELKEN

265 & 267 Greenwich Street, NEW YORK, N. Y.

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WANTED

To hear from parties with their lowest cash price, delivered here, for fancy comb honey in no-drip shipping-cases; also extracted honey. We are cash buyers, and remit on receipt of goods.

THE FRED W. MUTH CO.

27A4t 51 Walnut St., CINCINNATI, OHIO.

WE SELL ROOT'S GOODS IN MICHIGAN

Let us quote you prices on Sections, Hives, Foundation, etc., as we can save you time and freight. Beeswax Wanted for Cash.

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Queen-Clipping Device Free!

The **MONTHLY** Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. It is used by many beekeepers. Full printed directions sent with each one. We mail it for 25 cents; or will send it **FREE** as a premium for sending us One New subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address,

GEORGE W. YORK & CO.,

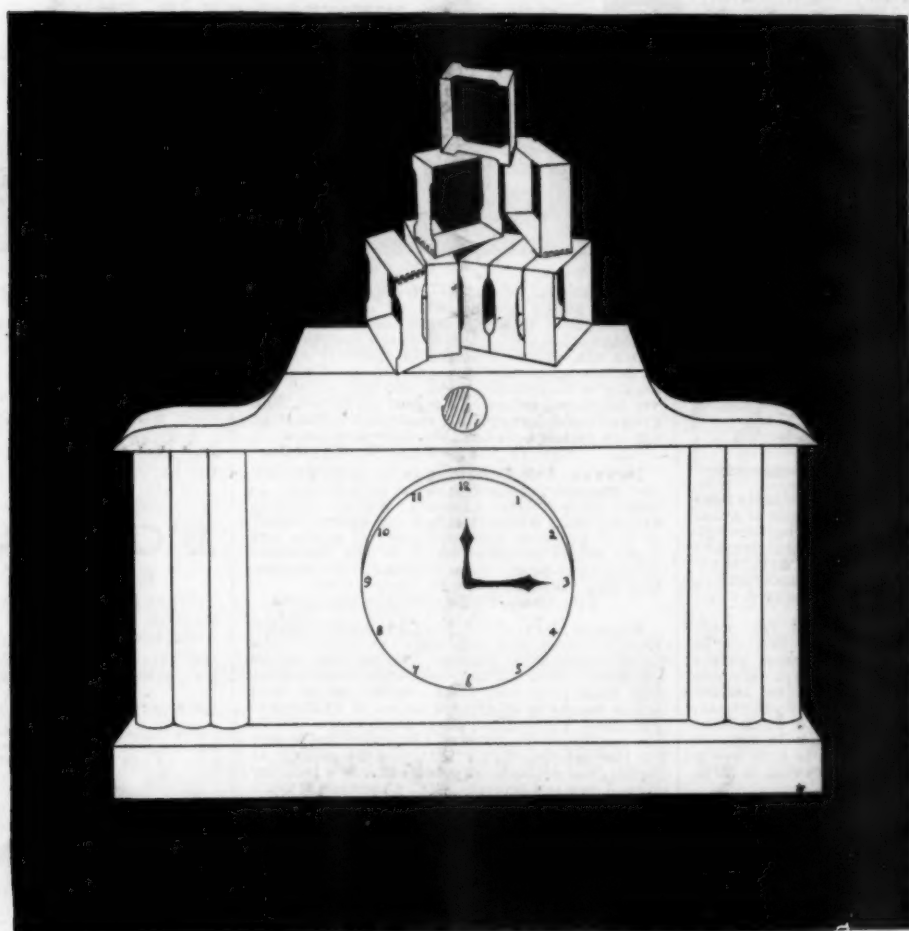
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